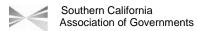
## **TABLE OF CONTENTS**

			<u>Page</u>
EXE	CUTIV	E SUMMARY	ES-1
	Introd	duction	ES-1
	Signi	ficant Impacts, Mitigation Measures, and Monitoring	ES-7
1.0	INT	RODUCTION	1-1
	Sumi	mary	1-1
	Scop	e and Methodology	1-1
	Envir	onmental Review Process	1-5
	Orga	nization of the PEIR	1-5
2.0	PRC	DJECT DESCRIPTION	2-1
	Back	ground and Location	2-1
	Purpo	ose and Need for Action	2-1
	Prop	osed Action	2-3
3.0	ENV	IRONMENTAL SETTING, IMPACTS, AND	
	MITIC	GATION MEASURES	3-1
	3.1	LAND USE	3.1-1
		Introduction	3.1-1
		Environmental Setting	3.1-1
		Regulatory Setting	3.1-6
		Methodology	3.1-11
		Significance Criteria	3.1-11
		Impacts and Mitigation Measures	3.1-11
	3.2	POPULATION, HOUSING, AND EMPLOYMENT	3.2-1
		Introduction	3.2-1
		Regional Setting	3.2-1
		Methodology	3.2-9
		Significance Criteria	3.2-10
		Impacts and Mitigation Measures	3.2-10
	3.3	TRANSPORTATION	3.3-1
		Introduction	3.3-1
		Environmental Setting	3.3-1
		Regulatory Setting	3.3-19
		Methodology	3.3-20
		Significance Criteria	3.3-21
		Impacts and Mitigation Measures	3 3-22

i

3.4	AIR QUALITY	3.4-1
	Introduction	3.4-1
	Environmental Setting	3.4-1
	Regulatory Setting	3.4-5
	Methodology	3.4-23
	Significance Criteria	3.4-25
	Project Impacts and Mitigation Measures	3.4-25
3.5	NOISE	3.5-1
	Introduction	3.5-1
	Environmental Setting	3.5-1
	Regulatory Setting	3.5-9
	Methodology	3.5-12
	Significance Criteria	3.5-13
	Impacts and Mitigation Measures	3.5-14
3.6	AESTHETICS AND VIEWS	3.6-1
	Introduction	3.6-1
	Environmental Setting	3.6-1
	Regulatory Setting	3.6-7
	Methodology	3.6-9
	Significance Criteria	3.6-9
	Impacts and Mitigation Measures	3.6-10
3.7	BIOLOGICAL RESOURCES	3.7-1
	Introduction	3.7-1
	Environmental Setting	3.7-1
	Regulatory Setting	3.7-16
	Methodology	3.7-19
	Significance Criteria	3.7-19
	Impacts and Mitigation Measures	3.7-20
3.8	CULTURAL RESOURCES	3.8-1
	Introduction	3.8-1
	Environmental Setting	3.8-1
	Regulatory Setting	3.8-12
	Methodology	3.8-15
	Significance Criteria	3.8-16
	Impacts and Mitigation Measures	3.8-16
3.9	GEOLOGY, SOILS AND SEISMICITY	3.9-1
	Introduction	3.9-1
	Environmental Setting	3.9-1
	Regulatory Setting	3.9-13
	Methodology	3.9-15
	Significance Criteria	3.9-16
	Impacts and Mitigation Measures	3.9-16

	3.10	HAZARDOUS MATERIALS	3.10-1
		Introduction	3.10-1
		Environmental Setting	3.10-1
		Regulatory Setting	3.10-4
		Methodology	3.10-6
		Significance Criteria	3.10-6
		Impacts and Mitigation Measures	3.10-7
	3.11	ENERGY	3.11-1
		Introduction	3.11-1
		Environmental Setting	3.11-1
		Regulatory Setting	3.11-8
		Methodology	3.11-11
		Significance Criteria	3.11-12
		Impacts and Mitigation Measures	3.11-12
	3.12	WATER RESOURCES	3.12-1
		Introduction	3.12-1
		Environmental Setting	3.12-1
		Regulatory Setting	3.12-15
		Methodology	3.12-21
		Significance Criteria	3.12-21
		Impacts and Mitigation Measures	3.12-22
	3.13	PUBLIC SERVICES AND UTILITIES	3.13-1
		Introduction	3.13-1
		Environmental Setting	3.13-1
		Regulatory Setting	3.13-7
		Methodology	3.13-8
		Significance Criteria	3.13-9
		Impacts and Mitigation Measures	3.13-9
4.0	ALTI	ERNATIVES	4-1
	Introd	uction	4-1
	No Pr	oject Alternative	4-2
	Modifi	ied 2001 RTP Alternative	4-10
	PILUT	T 1 (Infill) Alternative	4-18
	PILUT	Γ2 (Fifth Ring) Alternative	4-27
	The E	nvironmentally Superior Alternative	4-36
5.0	LON	G-TERM EFFECTS	5-1
	Signifi	icant Unavoidable Environmental Changes	5-1
	Signif	icant and Irreversible Impacts	5-6
	Cumu	llative Impacts	5-8
	Growt	th Inducing Impacts	5-11



6.0		ORT AUTHORS, ORGANIZATIONS, PERSONS CONSULTED, RENCES, AND ACRONYMS	6-1
	EIR Co		6-1 6-2 6-3 6-6 6-18
7.0	TECH	INICAL APPENDICES	7-1
	7.1 7.2 7.3 7.4 7.5 7.6	Notice of Preparation Responses to Notice of Preparation Air Emissions Tables Biological Resource Tables - California Department of Fish and Game Natural Diversity Database (CNDD) Water Resources Tables Cultural Resources Data	7.1-1 7.2-1 7.3-1 7.4-1 7.5-1 7.6-1
8.0	FIGUI	RES	
Figure	2.1-1:	The SCAG Region and Subregions	
Figure	2.1-2:	2030 High Occupancy Vehicle (HOV) Lane System	
Figure	2.1-3:	2030 Mixed Flow Improvements	
Figure	2.1-4:	2030 Transit Corridor System	
Figure	2.1-5:	2030 User Fee-Backed Capacity Improvements	
Figure	2.1-6:	2030 Mainline Freight Rail System Improvements	
Figure	2.1-7:	2030 Grade Separations	
Figure	2.1-8:	Maglev High-Speed Rail System	
Figure	3.1-1:	Existing Land Use Patterns	
Figure	3.1-2:	Open Space and Recreation Lands	
Figure	3.1-3:	City Boundaries	
Figure	3.1-4:	2000 Household Density by Census Tract	
Figure	3.1-5:	2000 Employment Density by Census Tract	

Figure 3.1-6:	Prime Agricultural Farm Land and Grazing Land	
Figure 3.3-1:	2000 Base Year Freeway Speed PM Peak (3pm to 7pm)	
Figure 3.3-2:	Existing (2000) Highway System	
Figure 3.3-3:	Existing (2000) Transit System	
Figure 3.3-4:	Major Airports	
Figure 3.4-1:	Air Quality Districts, Basins, and Monitoring Stations	
Figure 3.4-2:	Potentially Impacted Sensitive Receptors	
Figure 3.6-1:	Designated Scenic Highways and Vista Points	
Figure 3.7-1:	Vegetation Communities	
Figure 3.7-2:	General Locations of Known Wetlands	
Figure 3.7-3:	Known Sighting of Endangered, Threatened, or Rare Plant or Animal Species	
Figure 3.9-1:	Geomorphic Provinces in the SCAG Region	
Figure 3.9-2:	General Soil Types	
Figure 3.9-3:	Earthquake Faults and Peak Ground Acceleration	
Figure 3.9-4:	Areas Subject to Subsidence	
Figure 3.9-5:	Relative Landslide Potential	
Figure 3.9-6:	Location of Soils with Moderate to High Erosion Potential	
Figure 3.9-7:	Areas Subject to Liquefaction	
Figure 3.10-1:	Existing Freight Rail Lines	
Figure 3.12-1:	Average Monthly Precipitation for Selected Areas within the SCAG Region (1960- 2001)	3.12-2
Figure 3.12-2:	Major Surface Waters	
Figure 3.12-3:	Impaired Water Bodies	

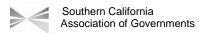


Figure 3.12-4:	Groundwater Basins	
Figure 3.12-5:	Areas Using Imported Water	
Figure 3.12-6:	Metropolitan Water District Service Areas	
Figure 3.12-7:	Federally Designated Flood Hazard Zones	
Figure 3.12-8:	Regional Water Quality Control Boards	
Figure 3.12-9:	Water Agencies in the SCAG Region	
Figure 3.12-10:	Comparison of Typical Urbanized and Non-Urbanized Hydrographs	3.12-29
Figure 3.13-1:	Fire Threat	
LIST OF TAE	BLES	
Table 2.1-1:	2004 RTP Population, Households, Employment in 2030 (in thousands)	2-2
Table 2.1-2:	Adopted 2004 RTP Goals	2-3
Table 2.1-3:	Adopted 2004 RTP Policies	2-4
Table 2.1-4:	2004 RTP Performance Outcomes, Measures, and Plan Objectives	2-5
Table 2.1-5:	New Regional Lanes Miles by County*	2-7
Table 2.1-6:	2002 and the 2030 Preferred Aviation Plan Air Passengers	2-9
Table 3.1-1:	Statewide County Rank, Total Value of Agricultural Production, and Lead Commodities, 2001	ding 3.1-6
Table 3.1-2:	Land Uses Affected by Major Highway, Transit, and Freight Rail Projects in the 2004 RTP	3.1-17
Table 3.2-1:	SCAG Population and Share of U.S. Population, 1900-2000	3.2-1
Table 3.2-2:	Population Growth in the 10 Largest Consolidated Metropolitan Statistical Areas, 1990-2000	3.2-2
Table 3.2-3:	Population Growth for SCAG Counties, 1990-2003	3.2-2
Table 3.2-4:	Ethnic Composition Comparison for SCAG Counties, 1990-2000	3.2-3
Table 3.2-5:	Age Distribution of the SCAG Counties, 1990 and 2000	3.2-4

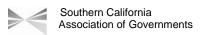


Table 3.2-6:	Building Permits Issued in the SCAG Region: 1990-2002	3.2-5
Table 3.2-7:	Owner and Rental Vacancy Rates in the SCAG Region, 2000	3.2-6
Table 3.2-8:	Homeownership Rates	3.2-6
Table 3.2-9:	Affordability Index (Percentage of Residents Who Can Afford Average Price Home)	3.2-7
Table 3.2-10:	Average Persons per Household	3.2-7
Table 3.2-11:	Total Wage and Salary Employment	3.2-8
Table 3.2-12:	Unemployment Rate in the SCAG Region	3.2-8
Table 3.2-13:	Population, Households, and Employment in the SCAG Region, by the Subregion Year 2000 and 2030 Plan and No Project	3.2-11
Table 3.2-14:	Residential and Business Land Uses within 150-Foot Radius of 2004 RTP Freeway, Transit, and Freight Rail Projects	3.2-12
Table 3.3-1:	Parties Directly Involved in the Development of a Regional Transportation Plan	3.3-2
Table 3.3-2:	Summary of Existing (2000) Daily Vehicle Miles & Percent Vehicle Hours Of Travel	3.3-5
Table 3.3-3:	Summary of Delay and Work Trip Length, 2000	3.3-5
Table 3.3-4:	Total Vehicle Fatalities, 2001	3.3-7
Table 3.3-5:	Existing (2000) Travel Mode Split (% of County Total)	3.3-8
Table 3.3-6:	Existing (2000) Regional Freeway Route Miles and Lane Miles by County	3.3-9
Table 3.3-7:	Existing (2000) Regional High Occupancy Vehicle (HOV) Route Miles and Lane Miles by County	3.3-9
Table 3.3-8:	Existing (2000) Regional Arterial Route Miles and Lane Miles by County	3.3-10
Table 3.3-9:	Key Statistics for Major Transit Operators (2001)	3.3-11
Table 3.3-10:	Existing (2002) Activity at Major Commercial Airports in the SCAG Region	3.3-17
Table 3.3-11:	Daily Vehicle Miles Traveled (VMT) in 2000 and 2030 (in millions)	3.3-23

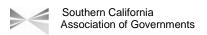


Table 3.3-12:	Daily Hours of Delay in 2000 and 2030 (in millions)	3.3-24
Table 3.3-13:	Percentage of Evening Work Trips Completed Within 45 Minutes	3.3-26
Table 3.3-14:	2000 and 2030 SCAG Regional Transportation System Accident Rates	3.3-27
Table 3.4-1:	Ambient Air Quality Standards for Criteria Pollutants	3.4-7
Table 3.4-2:	Air Quality Monitoring Data Summary	3.4-14
Table 3.4-3:	Criteria Pollutants Emissions by Nonattainment Area Plan Emissions in 2030 Compared to Current Conditions (Emissions in 2000)	3.4-27
Table 3.4-4:	SCAB Criteria Pollutant Emissions by County (SCAB portion only) Plan Emissions in 2030 Compared to Current Conditions (Emissions in 2000)	3.4-28
Table 3.4-5:	Criteria Pollutant Emissions by Nonattainment Area Plan Emissions in 2030 Compared to No Project Emissions in 2030	3.4-29
Table 3.4-6:	SCAB Criteria Pollutant Emissions by County (SCAB portion only) Project Emissions in 2030 Compared to No Project Emissions in 2030	3.4-30
Table 3.4-7:	PM10 Emissions for Heavy Duty Trucks per County	3.4-31
Table 3.4-8:	2003 SIPs (Emissions Budgets) and Regional Emission Analysis	3.4-38
Table 3.4-9:	South Coast Air Basin (SCAB) Ozone Emissions Analysis (tons/day) Summer Temperatures - SCAB	3.4-38
Table 3.4-10:	South Coast Air Basin (SCAB) Nitrogen Dioxide (NO2) Emissions Analysis (tons/day) Winter Temperatures - SCAB	3.4-38
Table 3.4-11:	South Coast Air Basin (SCAB) Carbon Monoxide (CO) Emissions Analysis (tons/day) Winter Temperatures - SCAB	3.4-38
Table 3.4-12:	South Coast Air Basin (SCAB) Particulate Matter (PM10) Emissions Analysis (tons/day) Annual Average Temperatures - SCAB	3.4-39
Table 3.4-13:	Ventura County – South Central Coast Air Basin (VC/SSCAB) Ozone (tons/day) Summer Temperature – SCCAB-Ventura County	3.4-39
Table 3.4-14:	Southeast Desert Modified Area Ozone (tons/day) Summer Temperatures Antelope Valley, San Bernardino in MDAB and Coachella Valley in SSAB	3.4-39
Table 3.4-15:	Mojave Desert Air Basin (MDAB) Particulate Matter (PM10) Emissions Analysis (tons/day) Annual Average Temperatures MDAB San Bernardino County (excluding Searles Valley)	3.4-39

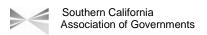


Table 3.4-16:	Salton Sea Air Basin – Coachella Valley PM!) (tons/day) Summer Temperatures – Antelope Valley, San Bernardino in MDAB and Coachella Valley in SSAB	3.4-40
Table 3.4-17:	Salton Sea Air Basin – Imperial County Ozone (tons/day) Summer Temperatures – SCCAB-Ventura County	3.4-40
Table 3.4-18:	Salton Sea Air Basin – Imperial County Particulate Matter (PM10) Emissions Analysis (tons/day) Annual Average Temperatures	3.4-40
Table 3.4-19:	Emission Inventory – Aircraft/Ground Support Equipment in tons Per year (tpy)	3.4-43
Table 3.5-1:	Noise Land Use Compatibility Matrix	3.5-2
Table 3.5-2:	Noise Levels Along Selected Freeways and Arterials in the SCAG Region	3.5-4
Table 3.5-3:	Reference Noise Levels for Various Rail Operations	3.5-6
Table 3.5-4:	Demolition and Construction Equipment Source Noise Levels	3.5-9
Table 3.5-5:	Types and Duration of Noise Produced by Proposed Projects	3.5-15
Table 3.5-6:	Draft 2004 RTP Projects With Potential Noise Impacts	3.5-18
Table 3.5-7:	Percentage of Roadways Where Noise Levels Exceed 66dBA* (Regardless of Land Use)	3.5-26
Table 3.6-1:	Caltrans Scenic Highways Program - Examples of Visual Quality Intrusions	s 3.6-2
Table 3.6-2:	Officially Designated State Scenic Highways	3.6-3
Table 3.6-3:	SCAG Roadways Eligible for State Scenic Highway Designation	3.6-4
Table 3.6-4:	2004 RTP Projects Planned on Roadways Eligible for State Scenic Highway Designation	3.6-15
Table 3.7-1:	Natural Wetlands	3.7-9
Table 3.7-2:	Characteristics of Major Coastal Rivers	3.7-10
Table 3.7-3:	Special Status Species Reported in the SCAG Region (Technical Appendices)	7.4-2
Table 3.7-4:	Special Status Communities Reported in the SCAG Region (Technical Appendices)	7.4-12

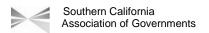


Table 3.7-5:	Large-Scale Protected Areas in the SCAG Region (Technical Appendices)	7.4-13
Table 3.7-6:	Natural Communities Conservation Plans	3.7-16
Table 3.7-7:	Special Status Habitat and Communities Occurring Within 150 feet of a Freeway, Transit, or Freight Rail Project (acres)	3.7-21
Table 3.7-8:	Natural Vegetation Occurring Within 150 feet of a Freeway, Transit, or Freight Rail Project (acres)	3.7-22
Table 3.7-9:	Natural Vegetation Acreage Occurring Within 0.25 miles of a Freeway, Transit, or Freight Rail Project (acres)	3.7-24
Table 3.7-10:	Wetland Acreage Occurring Within 150 feet of a Freeway, Transit, or Freight Rail Project	3.7-29
Table 3.8-1:	Significant Fossil Localities in the SCAG Region	3.8-3
Table 3.8-2:	Archaeological Site Distribution	3.8-4
Table 3.8-3:	California Historic Landmarks (CHL) of the Spanish Period (1769-1821)	3.8-7
Table 3.8-4:	California Historic Landmarks (CHL) of the Mexican Period (1822-1848)	3.8-9
Table 3.8-5:	California Historic Landmarks (CHL) of the American Period (1849 to Present)	3.8-10
Table 3.8-6:	Number of Landmarks per County	3.8-17
Table 3.8-7:	Undisturbed Areas Occurring Within 150 Feet of a Freeway, Transit, or Freight Rail Project (acres)	3.8-25
Table 3.9-1:	Characterization of Major Faults in the Southern California Region	3.9-5
Table 3.9-2:	Modified Mercalli Intensity Scale	3.9-10
Table 3.9-3:	Potential Impacts of Seismic and Geologic Hazards on Regional Transportation Projects (By County)	3.9-17
Table 3.10-1:	Hazardous Material Shipment Rates in the SCAG Region	3.10-2
Table 3.11-1:	Annual Transportation Energy Consumption in the SCAG Region for Base Years as Indicated	3.11-5
Table 3.11-2:	Average Monthly Household Electricity Usage	3.11-7

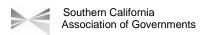


Table 3.11-3:	Projected SCAG Region Transportation Fuel Consumption (thousand gallons per day)	3.11-13
Table 3.12-1:	Average Total Precipitation for Selected Areas within the SCAG Region (1960-2001, in inches)	3.12-1
Table 3.12-2:	Water Balance Summary for SCAG's Hydrologic Regions (Technical Appendices)	7.5-1
Table 3.12-3:	Factors Influencing Per Capita Water Use	3.12-3
Table 3.12-4:	Water Supply Multiple Dry Year Projections for the MWD Service Area (acres-feet per year)	3.12-6
Table 3.12-5:	Major Water Suppliers Outside the MWD Service Area	3.12-7
Table 3.12-6:	Wastewater Flow and Capacity in the SCAG Region	3.12-9
Table 3.12-7:	Factors Influencing per Capita Water Use	3.12-10
Table 3.12-8:	Major Surface Waters	3.12-12
Table 3.12-9:	Partial List of Targeted Watersheds in the SCAG Region	3.12-19
Table 3.12-10:	California Adjudicated Groundwater Basins and Watermasters	3.12-20
Table 3.12-11:	Pollutants Associated with Transportation	3.12-23
Table 3.12-12:	New Regional Lane Miles by County	3.12-24
Table 3.12-13:	Impaired Water Bodies (303(d)) Occurring Within 150 feet of a Freeway, Transit, or Freight Rail Project in the 2004 RTP	3.12-25
Table 3.13-1:	Police Service Providers for Jurisdictions within SCAG Counties	3.13-2
Table 3.13-2:	Fire Protection Service Providers for Jurisdictions within SCAG Counties	3.13-2
Table 3.13-3:	Kindergarten through Grade 12 Enrollment and Teachers in the SCAG Region for the 2002-03 School Year (SY)	3.13-3
Table 3.13-4:	Construction Costs for New Schools	3.13-3
Table 3.13-5:	Tons Disposed in the SCAG Region	3.13-3
Table 3.13-6:	Permitted Active or Planned Solid Waste Landfills in the SCAG Region	3.13-4
Table 3.13-7:	Diversion Rate Summary	3.13-6

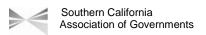


Table 4-1:	Characteristics of the 2004 RTP Alternatives	4-1
Table 4-2:	Criteria Pollutant Emissions By Nonattainment Area No Project Emissions in 2030 Compared to Current Conditions (Emissions in 2000) (in Tons per Day)	4-5
Table 4-3:	Criteria Pollutant Emissions By SCAB County (SCAB portion only) No Project Emissions in 2030 Compared to Current Conditions (Emissions in 2000) (in Tons per Day)	4-6
Table 4-4:	Criteria Pollutant Emissions By Nonattainment Area Modified 2001 RTP Emissions in 2030 Compared to Current Conditions (Emissions in 2000) (in Tons per Day)	4-12
Table 4-5:	Criteria Emissions By SCAB County (SCAB portion only) Modified 2001 RTP Emissions in 2030 Compared to Current Conditions (Emissions in 2000) (in Tons per Day)	4-13
Table 4-6	2001 RTP Modified Alternative $PM_{10}$ Emissions for heavy-duty Trucks per Nonattainment Area (Tons per Day)	4-13
Table 4-7	Criteria Pollutant Emissions By Nonattainment Area PILUT 1 Emissions in 2030 Compared to Current Conditions (Emissions in 2000) (in Tons per Day)	4-21
Table 4-8	Criteria Pollutant Emissions By SCAB County (SCAB portion only) PILUT 1 in 2030 Compared to Current Conditions (Emissions in 2000) (in Tons per Day)	4-22
Table 4-9	PILUT 1 Alternative PM <sub>10</sub> Emissions for heavy-duty Trucks per Nonattainmen Area (Tons per Day)	t 4-22
Table 4-10	Criteria Pollutant Emissions By Nonattainment Area PILUT 2 Emissions in 2030 Compared to Current Conditions (Emissions in 2000) (in Tons per Day)	4-30
Table 4-11	Criteria Pollutant Emissions By SCAB County (SCAB portion only) Pilut 2 in 2030 Compared to Current Conditions (Emissions in 2000) (in Tons per Day)	4-31
Table 4-12	PILUT 2 Alternative PM <sub>10</sub> Emissions for Heavy-Duty Trucks per Nonattainment Area (Tons per Day)	4-31
Table 7.6	Sites in the SCAG Region Listed on the National Register of Historic Places	7.6-4